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AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 3, line 30 to page 4, line 26 of the specification with the following paragraph:

The invention also pertains, at least in part, to tetracycline compounds of formula (III):

wherein:

J⁵ and J⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, sulfonyl, acyl, alkoxycarbonyl, alkaminocarbonyl, alkaminothiocarbonyl, substituted thiocarbonyl, substituted carbonyl, alkoxythiocarbonyl, or linked to form a ring;

J⁷ and J⁸ are each alkyl, halogen, or hydrogen;

X is CHC(R¹³Y'Y), CR⁶'R⁶, C=CR⁶'R⁶, S, NR⁶, or O;

R², R², R⁴, and R⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R⁴ is NR⁴'R⁴", alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen;

 R^{2} ', R^{3} , R^{10} , R^{11} and R^{12} are each hydrogen or a pro-drug moiety;

R⁵ is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R⁶ and R⁶ are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R⁷ is hydrogen, nitro, alkyl, alkenyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, thionitroso, or –(CH₂)₀₃NR^{7c}C(=W')WR^{7a};

W is CR^{7d}R^{7e}, S, NR^{7b} or O;

W' is O, S, or NR^{7f} :

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R^{7a}, R^{7b}, R^{7c}, R^{7d}, and R^{7e} are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R⁸ is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R¹³ is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; and

Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulfhydryl, amino, alkyl, alkenyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl, and pharmaceutically acceptable salts thereof.

Please replace the paragraph at page 8, line 5 to page 9, line 29 of the specification with the following:

In another embodiment, the aminoalkyl tetracycline compound of the invention may be a compound of the formula (II):

wherein:

J⁵ and J⁶ are each independently hydrogen, alkyl, alkenyl, alkynyl, aryl, sulfonyl, acyl, alkoxycarbonyl, alkaminocarbonyl, alkaminothiocarbonyl, substituted thiocarbonyl, substituted carbonyl, alkoxythiocarbonyl, or linked to form a ring;

J⁷ and J⁸ are each alkyl, halogen, or hydrogen;

X is CHC($R^{13}Y'Y$), $CR^{6'}R^{6}$, $C=CR^{6'}R^{6}$, S, NR^{6} , or O;

R², R², R⁴, and R⁴ are each independently hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R⁴ is NR⁴'R⁴", alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen; R²', R³, R¹⁰, R¹¹ and R¹² are each hydrogen or a pro-drug moiety; Application No.: 10/737361 Examiner: C. C. Chang Docket No.: PAZ-178CPCN Art Unit: 1625

R⁵ is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R⁶ and R⁶ are each independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R⁷ is hydrogen, nitro, alkyl, alkenyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, arylalkyl, amino, arylalkenyl, arylalkynyl, thionitroso, or –(CH₂)₀₋ 3NR^{7c}C(=W')WR^{7a};

W is CR^{7d}R^{7e}, S, NR^{7b} or O;

W' is O, S, or NR^{7f} ;

R^{7a}, R^{7b}, R^{7c}, R^{7d}, and R^{7e} are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkynyl, alkylsulfinyl, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R⁸ is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R¹³ is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl; and

Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulfhydryl, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl, and pharmaceutically acceptable salts thereof.